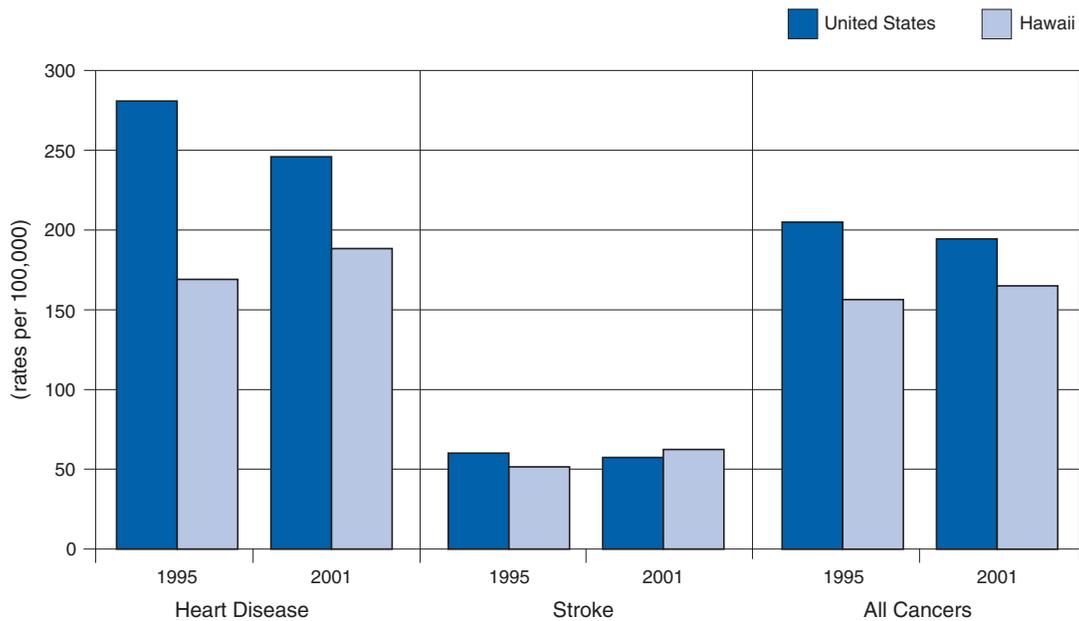


# Chronic Diseases: The Leading Causes of Death

## The Leading Causes of Death

United States and Hawaii, 1995 and 2001



Source: National Center for Health Statistics, 2003

## The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

## Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation’s leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

# The Leading Causes of Death and Their Risk Factors

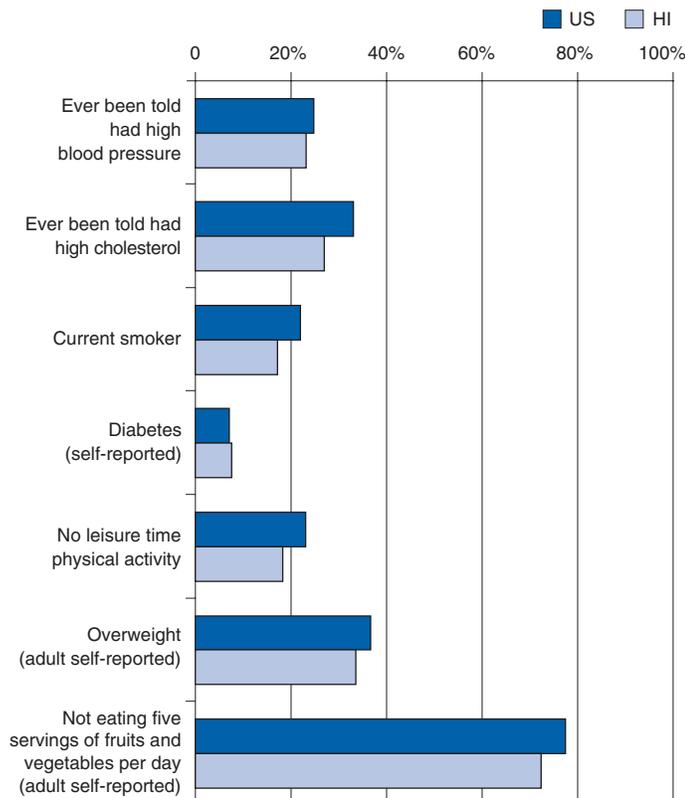
## Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Hawaii, accounting for 2,310 deaths or approximately 28% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 766 deaths or approximately 9% of the state's deaths in 2001.

### Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

## Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 2,090 are expected in Hawaii. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 5,070 new cases that are likely to be diagnosed in Hawaii.

Estimated Cancer Deaths, 2004

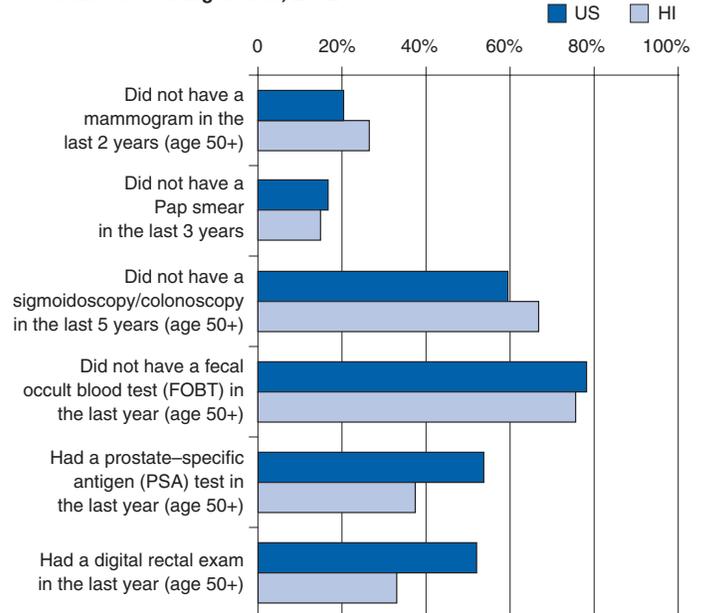
Cause of death	US	HI
All Cancers	563,700	2,090
Breast (female)	40,110	140
Colorectal	56,730	200
Lung and Bronchus	160,440	530
Prostate	29,900	130

Source: American Cancer Society, 2004

### Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

# Hawaii's Chronic Disease Program Accomplishments

## Examples of Hawaii's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decreases occurring among white males (262.1 per 100,000 in 1990 versus 243.7 per 100,000 in 2000) and white females (187.9 per 100,000 in 1990 versus 149.8 per 100,000 in 2000).
- A 3.2% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 29.7% in 1992 to 26.5% in 2002).
- A lower prevalence rate than the corresponding national rate for self-reported obesity (16.4% in Hawaii versus 22.8% nationally).

## CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Hawaii in the areas of cancer, heart disease, stroke, and related risk factors.

### CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Hawaii, FY 2003

<b>SURVEILLANCE</b>	
Behavioral Risk Factor Surveillance System (BRFSS) <i>Hawaii BRFSS</i>	\$90,579
National Program of Cancer Registries	\$0
<b>CHRONIC DISEASE PREVENTION AND CONTROL</b>	
Cardiovascular Health Program	\$0
Diabetes Control Program <i>Hawaii Diabetes Control and Prevention Program</i>	\$355,414
National Breast and Cervical Cancer Early Detection Program <i>Hawaii Breast and Cervical Cancer Control Program</i>	\$1,014,518
National Comprehensive Cancer Control Program <i>Hawaii Comprehensive Cancer Control Program</i>	\$103,408
WISEWOMAN	\$0
<b>MODIFYING RISK FACTORS</b>	
National Tobacco Prevention and Control Program <i>Hawaii Tobacco Prevention and Education Project</i>	\$745,339
State Nutrition and Physical Activity/Obesity Prevention Program ( <i>No CDC Funding</i> )	\$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
<b>Total</b>	<b>\$2,309,258</b>

*The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.*

### Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Hawaii that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

# Opportunities for Success

## Chronic Disease Highlight: Cardiovascular Disease

Heart disease continues to be the leading cause of death in the United States and in Hawaii. CDC mortality data for Hawaii indicate that in 2001, more than 2,300 people died of heart disease and more than 750 people died of stroke. That year, these conditions accounted for over 38% of all deaths in the state.

Although Hawaii's heart disease mortality rates are below the national average (404 per 100,000 versus 535 per 100,000), not all segments of the population have benefited equally from recent improvements in death rates. Analysis of cardiovascular disease mortality data in Hawaii from 1996 to 2000 shows that heart disease death rates for Asian/Pacific Islander men (530 per 100,000), American Indian/Alaska Native men (707 per 100,000) and Hispanic men (548 per 100,000) were higher than the rate for white men (473 per 100,000).

In Hawaii, the stroke death rate from 1996 to 2000 (116 per 100,000) was lower than the national average (121 per 100,000). However, the stroke death rate for the state's Asian/Pacific Islanders during that period (129 per 100,000), which was higher than the national rate for all races and higher than the national rate for Asian and Pacific Islanders (105 per 100,000), has not shown any improvement since the early 1980s.

Although the prevalence of elevated cholesterol, high blood pressure, and smoking has decreased since the mid 1980s, they remain serious risk factors for much of the adult population in Hawaii. Data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) indicate that 27% of adults in Hawaii have been told they have high blood cholesterol, 23.2% have been told they have high blood pressure, and 17.2% are smokers. In addition, half of the adults in Hawaii (50.2%) do not meet the recommended guidelines for moderate physical activity and only 27.6% consume 5 or more servings of fruits and vegetables per day. Because of these risk factors, more than half of the adult Hawaiian population is either overweight (36.0%) or obese (17.1%).

The Hawaii Department of Health recently implemented *Start. Living. Healthy.* This multimedia, public education campaign is designed to provide the people of Hawaii with information on how to adopt a healthy lifestyle, become physically active, eat nutritious foods, and live tobacco-free.

## Disparities in Health

About 3.7% of the U.S. population consider themselves to be of Asian or Pacific Island descent, according to the 2000 U.S. Census. These data also indicate that Asian/Pacific Islanders (which include Native Hawaiians) represented 51% of the population in Hawaii, making it the state with the highest population of Asian/Pacific Islanders in the United States.

According to CDC's Behavioral Risk Factor Surveillance System 2003 data, Hawaiians are less likely to be diagnosed with high blood pressure (23.2%), less likely to be diagnosed with high cholesterol (27.0%), less likely to smoke (17.2%), and are more likely to engage in leisure time physical activity (81.7%). Despite these healthy indicators, Asian/Pacific Islanders generally experience poorer health than the general U.S. population. Asian/Pacific Islanders are more at risk for developing and dying from cancer, heart disease, diabetes, and other diseases. The leading causes of death among Asian/Pacific Islanders are heart disease, cancer, and stroke. Asian/Pacific Islanders in Hawaii have higher death rates for heart disease when compared with their white counterparts (414 per 100,000 versus 387 per 100,000) and higher death rates for stroke when compared with their white counterparts (129 per 100,000 for Asian/Pacific Islanders versus 87 per 100,000 for whites).

According to 2002 BRFSS data, Asian/Pacific Islander women aged 50 years or older are less likely than their white counterparts to report having had a mammogram in the last 2 years (28.6% for Asian/Pacific Islander women versus 24.3% for white women). Moreover, Asian/Pacific Islander women aged 18 years or older are less likely than their white counterparts to report having had a Pap smear in the last 3 years (19.1% for Asian Pacific Islander women versus 12.5% for white women).

## Other Disparities

- **Smoking:** In 2002, Asian/Pacific Islanders had higher rates of smoking (18.2%) than Asian/Pacific Islanders in the general U.S. population (13.7%); although their smoking rates were lower than whites (20.0%) and African Americans (21.9%) in Hawaii.
- **Overweight and Obesity:** In 2002, Asian/Pacific Islanders in Hawaii were least likely to be overweight or obese (47.9%) as compared to African Americans (66.5%), Whites (50.1%), and Hispanics (49.1%) in Hawaii; although they were more likely to be overweight or obese when compared to Asian/Pacific Islanders in the general U.S. population (35.9%).

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962  
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